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Governance mechanisms in the physician–patient relationship: a literature review and conceptual framework

Gabriela Tofan,* Virginia Bodolica PhD† and Martin Spraggon PhD†

*Graduate Student, School of Public Health, State University of Medicine and Pharmacy "Nicolae Testemitanu", Chisinau, Republic of Moldova, and †Associate Professor, Department of Management, School of Business and Management, American University of Sharjah, Sharjah, United Arab Emirates

Correspondence
Virginia Bodolica, Ph.D.
Associate Professor
Department of Management
School of Business and Management
American University of Sharjah
PO Box 26666
Sharjah, United Arab Emirates
Email: virginia.bodolica@hec.ca

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Abstract

Background The physician–patient relationship is a critical component of the integrated approach to excellence in health-care delivery. Although commonly modelled within the boundaries of the agency theory and regarded as synonymous to an agent–principal interaction, there exists only a sparse understanding about the most effective ways of governing it.

Objective This article undertakes a selective review of the growing body of research on the governance of the physician–patient relationship to discuss the current state of the knowledge in the field and suggest promising avenues for further exploration.

Findings On the basis of an extensive analysis of the relevant literature, we identify two emerging streams of inquiry on the trust-based (i.e. trust and ethical oversight) and distrust-based (i.e. patient information-empowerment and decision-making authority) governance mechanisms of the physician–patient relationship and discuss the key findings within each stream.

Discussion To conciliate the on-going scholarly debate concerning the efficacy of trust- and distrust-based mechanisms, we draw the foundations of a conceptual framework which might serve as a guide for more integrative research endeavours on the governance of the physician–patient relationship.

Introduction

The physician–patient relationship is a critical issue in health-care markets and a major component of the pervasive concern for quality medical service delivery.[1,2] Characteristics of the physician–patient liaison have been found to affect overall patient satisfaction more significantly than features associated with the general organization of medical practice.[3,4] The presence of a personal doctor,[5] the congruence between patient preferences and practitioner style, the patient-centred practice of the physician,[6] the quality of the doctor–patient

communication,[7] and the existence of a mutual agreement concerning the health problem and its treatment[8] were shown to be among the key drivers of improved patient satisfaction with service providers and overall care. Owing to its centrality in the complex health-care system, many research efforts have been dedicated to finding optimal principles for building a successful relationship between patients and physicians to allow the achievement of favourable clinical and relational outcomes. Medical economists and ethicists were the first to observe that interactions between caregivers and receivers may be vulnerable to breakdown in the absence of behavioural controls and moral constraints, calling for more scholarly attention to the question of governance of the physician–patient relationship.[9,10]

The physician–patient relationship has long been modelled within the agency theory framework[11,12], which relies on the principle of separation of ownership and control and highlights the need for implementing governance mechanisms for solving the arising principal–agent conflicts of interest.[13,14] By conceiving patients as principals who depend on physicians for medical advice, it became possible to illustrate the ensuing potential for inefficiencies in health-care provision and the urge for mitigating them.[15] The created opportunity for physicians to act self-interestedly at the patients' expense coupled with asymmetries of information between the two parties in the service exchange, exacerbated the need to uncover effective governance devices for alleviating the agency problems between physicians and patients. Although pay-for-performance, contract devising and monitoring are key agency recommendations,[16,17] several authors argued that the peculiarities of medical markets may undermine their applicability for securing optimal governance of the physician–patient relationship.[18–20]

The topic of governing the physician–patient encounter is gaining more momentum because of the recent transformations of the health-care landscape. The tendency to regard patients as buyers–consumers of health services resulted in the adoption of efficiency-oriented models in medical contexts making it more difficult for physicians to act in the patients' best interests.[21] The explosion of health information on the Internet and the improved accessibility to online media sources favoured the emergence of a new patient who is informed and willing to exert autonomy regarding his treatment.[22] Information technology is seen as a tool for bridging the agent–principal health information gap and fostering patients to become active participants in the management of their care.[23,24] These changing realities are perceived as a threat to the integrity of the physician–patient relationship necessitating new models of interaction and mechanisms for governing them. Recognizing the physician–patient centrality to health-care excellence, clinical governance scholars called for additional research and consumer-driven actions for improving the relational quality in medical settings that may result in more satisfied and healthier patients.[25,26]

The purpose of this review article is to contribute to the body of research on the effective governance of the physician–patient relationship. We undertook a selective review of the literature to identify dominant themes surrounding the topic, assess the current knowledge in the field and suggest avenues for further exploration. Drawing upon insights from the agent–principal model in health-care markets and the need for mitigating the physician–patient agency problems, our analysis resulted in the identification of two groups of governance devices, labelled 'trust-based' and 'distrust-based' mechanisms. The former group refers to patients' trust, physicians' morality and ethical oversight, while the later includes patients' information empowerment, vigilance and self-determination. In light the of the scholarly disagreement concerning the effectiveness of these groups in governing the physician –patient encounter, we advance a conceptual framework as a guide for an integrative work on the relational governance in medical settings. The idea underlying our framework is that the determination of suitable governance

devices for a model of physician–patient interaction is a function of contextual embeddedness within a national medical market, personal attributes of patients and practitioners and optimal fit between patients' preferences for information and decision-making autonomy and physicians' communication and behavioural styles.

Literature review

A review of health-care governance literature spanning the last two decades was conducted with an emphasis on the mechanisms for governing the physician–patient encounter. We explored PubMed, ProQuest, ScienceDirect and JSTOR databases to allow inclusion of relevant articles from health care, economics, marketing, governance and ethics disciplines. 'Physician–patient relationship', 'health-care governance', 'agency in medical encounter', 'patient autonomy and trust' and 'patient information-empowerment' keywords were used to filter the articles based on their relevance. We have screened the reference lists of the recently published articles to identify additional studies that were missed during the database search.

Agency in the physician–patient encounter

Health economists extended the application of the standard agency theory to medical markets, modelling the physician–patient relationship as an interaction between agent and principal.[4,9,27,28] The physicians have been conceived as agents who are responsible for making optimal health-related decisions on behalf of principals–patients. Similar to the classic agency exchange, the physician–patient encounter has been characterized by the presence of information asymmetries where the physicians' information advantage allows them to behave opportunistically in front of ill-informed patients.[23,26,29] Although patients expect their doctor to provide information on current health status and potential treatment so that they can make rational choices,[15] there is no obvious incentive for the agent to reveal his activities to the principal.

While agency theory postulates that performance-based compensation, contract devising and monitoring are effective solutions for realigning the divergent principal–agent horizons, these governance tools encounter several limitations in the health-care context.[16] First, even if an effective rewards package linked to outcomes can be designed for standard agents–managers, it might be less relevant in the physicians' professional acting. In medical settings, it is difficult to define the outcomes and measure doctors' contribution to the attainment of outcomes without considering that patients might not be concerned exclusively with tangible outcomes but also with the overall process of service delivery.[27] The successful outcome of a therapy is not entirely under the doctor's control, sometimes necessitating the patient's cooperation for executing the recommended treatment steps. Similar to physicians who have a discretionary scope concerning their diagnosis and therapeutic decisions, patients can also exert their freedom to decide about their compliance with the proposed curative action.[26] Owing to the incidence of this double moral hazard, both physician clinical judgment and patient health-relevant behaviour have to be considered in achieving health outcomes.[28]

Second, devising optimal compensation schemes for physicians based on the normative agency model is inappropriate as the patient–principal does not set the incentive-compatible contract for the agent, which is usually determined by third parties like the government. Third, the ability of patients to monitor the physician is limited because of their lack of knowledge and experience in the field of medical practice. The costs of monitoring the regular doctor are high as it is expensive for the patient to 'shop-around' for getting insights from other agents about the most beneficial therapy to be followed. By cumulating opinions from multiple experts, principals become better informed and enabled to challenge their current physician, question his medical advice, ask for more explanations of the treatment

plan and ultimately force him to be a better agent. The health-care landscape is further complexified when accounting for the evolved nature of the principal–agent relationship, and the resulting symmetry of information owing to the increased access to online sources and improved health literacy of patients.[9]

Alternatively, if patients acknowledge that doctors' actions are already inscribed within ethical principles consistent with the Hippocratic tradition[16], they might prefer to trust their physicians' decisions and moral values rather than seek for additional information to make decisions for themselves. In the context of multiple agents and repeated physician–patient interactions, the behaviour of physicians is ethically constrained as they do not want their patients to lose faith in them, particularly when they are monitored by other doctors.

Many agency scholars approach physicians' acting and decision making from the perspective of 'double agents' who are accountable for their professional judgment to not only patients but also health insurances and organizations that employ them.[9,11,12] Under the mounting pressure imposed by resource scarcity, increasing administrative requirements and continuous search for efficiency, physicians are faced with an ethical dilemma of coping with institutional challenges of their everyday work, while striving to provide the best treatment to patients. The dual contradictory obligations to their employer and patients embed doctors' behaviour within a narrow framework of action that might result in a disrupted service provision and an impoverished relationship between caregivers and receivers. Both explicit and implicit governance arrangements are needed to minimize the risk of these conflicting requests being fulfilled at the expense of one of the two principals and protect the relational trust as a cornerstone of the physician–patient encounter.[9]

If the reliance on standard agency prescriptions for solving agent–principal problems is challenging in health-care settings, other methods for reducing physician–patient conflicts should emerge in the literature. The new medical information realities and interaction models necessitate adequate governance mechanisms for rejuvenating the relationship between doctors and well-informed patients.[17] In the health-care context, agency theory should be used as a tool for diagnosing the incongruity of goals between service providers and consumers, predicting their interest-driven behaviour and illustrating what the consequences for the medical system would be like without moral constraint and professional ethics.[10]

Governance mechanisms in the physician–patient relationship

Trust-based governance

Trust is a widely explored governance mechanism that has been framed within interactional boundaries among parties involved in an exchange.[2] Often seized through a variety of behavioural predispositions such as propensity, attitude or intention, the trust concept incorporates situations when a party chooses to relinquish control and assume psychological and emotional risk[30] in an anticipation that another party will diligently honour its obligations.[31,32] Trust involves making oneself vulnerable to another and expecting some reciprocation of vulnerability in a pattern of joint commitment[30] and mutually supporting bond of trust.[33] Being taken-for-granted or negotiated implicitly,[34,35] trust is seen as a valuable measure of social capital[36] that is relevant in the absence of other guarantees of people's trustworthiness to act in the best interest of those who cannot enter a contract.[37] Taking into account its predominantly relational nature, trust has been seen as a vital factor for building effective relationships and enhancing cooperative behaviours in interpersonal and interorganizational settings.[38,39]

Similar to other service contexts, trust usage has been extended to the analysis of the quality of physician–patient interactions in health-care markets.[2,40,41] Owing to patients' vulnerability originating from information asymmetries and uncertainty of medical practice, trust is a key prerequisite of successful healing and a critical

governance attribute of consumers' encounter with caregivers (See Table 1). In the light of its importance for securing adherence to therapeutic recommendations, high quality of care, effective communication, optimal clinical outcomes and overall satisfaction, many studies highlighted the value of measuring trust embedded in the physician–patient relationship[32,42] and developing an instrument for capturing trust domains.[41,43,44] Researchers uncovered seven categories of patients' trust in physician behaviour, five of which were interactional, and the remaining two were related to technical expertise.[44]

Acknowledging its benefits and inner complexity, trust represents a central issue of investigation for health economists and medical ethicists, each emphasizing a different facet of this multidimensional construct. The former conceive trust as principals' subjective evaluation of agents' trustworthiness and patients' expectation that physicians will comply with their fiduciary duty by placing consumers' well-being above other considerations.[9,23,45] The later underline the ethical connotation of a trust-based liaison and the moral obligation of doctors to adhere to ethical principles of medical professionalism and possess high standards of moral conduct[46], which serve as a basis for nurturing patients' confidence in doctors' technical competence, professional integrity and respect for patient autonomy.[47–49] These interpretations of trust are not exclusive but rather intertwined, with economists implicitly recognizing an element of trust in agency relations[50,51] and relying on ethicists' assumptions to explicate the counterintuitive agents' behaviour. A study of Japanese physicians who prescribe and dispense drugs showed that, while the profits that physicians made from dispensing drugs affected their prescription decisions, they also cared about patients' welfare by recommending less expensive drugs.[29] Noting that agents may refrain from opportunism in the presence of high morality, the author argued that the agency problem can be reduced (and patients' trust partially recuperated) via physicians' altruism and ethical values.

Trust is positively correlated with patients' willingness to comply with recommended treatment[41,52] and satisfaction with physician,[38,45,52] especially in repeated interactions with a regular doctor.[43,53,54] In an observational investigation, it was reported that satisfaction levels for low-trust patients did not differ whether or not they consulted their family practitioner.[53] Patients' trust is highly beneficial for building long-term relationships with service providers and securing optimal outcomes.[38] Interestingly, some studies showed that trust in physicians resulted in lower levels of patients' involvement in decision making[55] and was not an important correlate of patients' ameliorated health condition, suggesting that trust is mainly a relational governance mechanism, which is critical for the quality of the physician–patient interaction.[41]

Examining advantages of trust-based encounters for obstetric patients, researchers found that women's propensity to trust the caregiver significantly impacted their intention to return to the same doctor when additional advice is required and their involvement in positive word-of-mouth by referring the doctor to others.[2] Patients who trusted their physician displayed higher ease-of-voice patterns because of their confidence that service complaints will be handled in a professional manner. In a large empirical investigation, it was reported that trusting individuals in an insured setting where choices are restrained built better physician–patient relationships and exhibited higher levels of perceived quality of care than non-trusting patients.[23] For non-insured consumers who were armed with more information and enabled to make choices trust did not exert a significant influence on perceived outcomes of health-care delivery.

Patients' trust in medical profession and doctors' value system emerge as governance devices in the literature on a traditional doctor-centred model of physician–patient interactions.[56] This model emphasizes the relational inequality stemming from uneven information distribution between paternalistic physicians and lay patients.[57,58] The relationship is essentially hierarchic where the practitioner, because

Table 1 Summary of selected articles on trust-based governance of the physician–patient encounter

Reference	Study type/sample	Governance tool	Key findings
Harris[69]	Descriptive (book)	Ethics and moral values	Physicians' moral obligation to value life (personal existence and that of others)
Clawson[60]	Narrative (case example)	Professional ethics	Need to incorporate ethical decision-making (patient autonomy, informed consent, interprofessional relations and resource distribution) in the daily medical practice
Gray[40]	Descriptive (opinion)	Trust and ethical standards	Physicians' fiduciary ethic as an important source of trustworthiness of managed care
Thom and Campbell[44]	29 US patients (qualitative)	Trust in physicians	Trust driven by interactional factors (appreciating patient experience, displaying caring attitude, communicating clearly, building partnership and respecting the patient) and technical expertise (diligence in establishing a diagnosis and delivery of appropriate treatment)
Kao *et al.*[43]	292 US patients	Trust in physicians	Trust driven by patient choice of physician, longer relationships and trust in managed care organization
Safran *et al.*[41]	7204 adults in US	Trust in physicians	Trust associated with treatment adherence and patient satisfaction, but uncorrelated with improved health status
Pearson and Raeke[42]	Narrative (review)	Trust in physicians	Importance of relational trust and measures of trust need to evolve to address continuing changes in health care
Mechanic and Meyer[31]	90 patients (exploratory)	Trust in physicians	Patients trust as an iterative process; trust related to doctor's interpersonal competence, concern, compassion and technical competence (assessed by reputation)
Hall[50]	Essay	Trust	Element of trust embedded in every relational encounter
Rogers[84]	Descriptive (opinion)	Trust in patients	Moral and practical desirability of physician to adopt a trusting stance in medical encounters and trust patients
O'Neill[37]	Descriptive (book)	Trust	Trust is a valuable social capital and should be used when there are no other guarantees of people's trustworthiness
Balkrishnan *et al.*[52]	1117 US individuals	Trust (3 types)	Trust in physicians, health insurers and medical profession as drivers of care seeking behaviour and patient satisfaction
Baker *et al.*[53]	418 US and 650 UK patients	Trust in regular doctor	Trust as an important determinant of patient satisfaction with consultations
Kraetschmer *et al.*[55]	606 patients in Canada	Trust in physicians	Patients with higher levels of trust display lower desire for participation in decisions about medical treatment
Jotkowitz *et al.*[46]	Descriptive (essay)	Medical professionalism	Primacy of patient welfare, patient autonomy and social justice as key ethical principles of medical profession

Table 1. Continued

Reference	Study type/sample	Governance tool	Key findings
Leisen and Hyman[38]	214 US respondents	Trust in physicians	Trust associated with positive relational outcomes (length of relationship and patient satisfaction)
Evans *et al.*[48]	6 patients in genetics (qualitative)	Relational ethics	Relational ethics (with engagement, dialogue and presence) contributes to building a strong relationship and enhances the outcomes of genetic counselling for both parties
Thom *et al.*[32]	Narrative (review)	Trust in physicians	Trust as a salient factor for measuring the physician–patient relational quality
Magill and Prybil[49]	Descriptive (essay)	Professional ethics	Renewed commitment to ethical standards of the medical profession as means to regain patient trust
Tarn *et al.*[54]	879 US & 304 Japanese patients	Trust in physicians	Trust associated with greater religiosity, more acculturation, less patient desire for autonomy and longer patient–physician relationships
Atkins[47]	Descriptive (essay)	Relational trust	Imbalance of knowledge and expertise in physician–patient relation requires neither authoritative nor egalitarian trust
Miller[33]	Use of opioid analgesics	Trust in patients	Trust as a mutual factor; clinical importance of physician trust in patients is overlooked and has to be emphasized
Lim[51]	1725 patients in South Korea	Trust in physicians	Trust (built via effective doctor communication) increases the total elderly use of medical care
Langer *et al.*[9]	Descriptive (essay)	Medical ethics	Individual and institutional ethics as means to address ethical challenges in the physician–patient encounter
Lee and Lin[45]	480 patients in Taiwan	Trust in physicians	Trusting diabetic patients display higher levels of adherence, self-rated health and therapeutic response
Crutchfield and Morgan[2]	467 US female patients	Trust in obstetricians	Trust as a key determinant of patient retention, referral behaviour and ease of voice
Skirbekk *et al.*[35]	16 patients in Norway (qualitative)	Trust in family physicians	Patients' mandate of trust negotiated implicitly, with more open mandates given to physicians with higher interest levels, more sensitiveness, longer time dedication to patients and alliance building behavioural patterns
Dwyer *et al.*[23]	43 968 US respondents	Trust in physicians	Trusting individuals build better relationships and report better perceived outcomes and quality of care

of expert knowledge and skills, possesses the authority to make decisions on patients' behalf with little consideration of their preferences.[59] Being constrained to assume a passive role and submit to physician's professional judgments, patients ought to invest their trust in the physician's fiduciary obligation of making patients' health a top priority. The assurance that doctors will make an ethical use of their decision-making power comes from ethical oversight and physicians' morality inscribed in Hippocratic tradition.[48,60]

This model poses some challenges related to a disrespect of patients' freedom of choice and an overt display of their vulnerability, making them susceptible to potential abuse and trust violation. The rise of online medical technology which generated information-empowered patients adds to the currently witnessed erosion of trust in the quality of health-care delivery.[61] Scholars are not unanimous about the most effective ways of addressing these challenges, often advancing antagonistic solutions. On the one hand, trust continues to play an important role in the physician–patient encounter but it is manifested more via patients' confidence in governance structures that emphasize monitoring of medical acting rather than through relational trust in physicians' fiduciary ethics.[40] On the other hand, patients' trust is essential for the successful functioning of health-care markets and, owing to its emotional and psychological value, it cannot be entirely replaced by surrogate governance arrangements.[50] Admitting that trust is a critical ally of both parties in the medical exchange, some authors favour the preservation of physicians' authority and exclusive right to prescribe treatment as they are the ones who possess specialized knowledge and experience.[47] In the presence of moral tension between patients' dependence and autonomy, the key physician–patient challenge is to build interpersonal trust, which is neither authoritative nor formally egalitarian in nature.[47,62]

Distrust-based governance

Several changes in medical markets contributed to the emergence of a new paradigm of physician–patient encounter and pervasiveness of distrust-based governance devices.[36] The continuous pressure for controlling escalating health-care costs and the adoption of managed care systems[40] gave rise to patients' scepticism about the value of placing their trust in time-constrained and efficiency-oriented physicians (See Table 2). People started to voice demands of autonomy for reducing their reliance on physicians and exerting decision-making power for solving their health problems. The Internet has played an important role in this evolving medical landscape and paradigmatic shift in the physician–patient liaison.[61,63] The explosion of online health-relevant information that allowed filling the gaps in physician communication[64] gave birth to an era of empowered e-patients who are willing to possess less psychological and more tangible instruments for overseeing medical acting.[65]

Proponents of mandatory autonomy advance several arguments to promote patients' self-determination concerning their care.[62] People's innate preference for taking control of their own life can produce curative effects, helping patients who choose their therapy to recuperate more quickly. Individuals have the moral obligation to themselves, the health-care system and the broader society to reason, act and decide independently.[66] As physicians cannot be trusted to suppress entirely their self-interest in favour of satisfying patients' needs, the patients' self-protection instinct is a natural response to physicians' opportunism.[4,27] Drawing upon its complex philosophical meaning and ethical understanding, the autonomy concept in a clinical encounter requires respecting patients' freedom to express individual aspirations and recognizing equality in the capacity for independent choice and self-governance.[67,68] Autonomy should be valued in its own right[69] and by virtue of what patients not only do but also think about their roles and contributions to medical decision-making and relationships with doctors.[70,71] Prior evidence suggests that patients who are involved in their health-related issues are more effective in obtaining clinical information from physicians,[72] achieve better

Table 2 Summary of selected articles on distrust-based governance of the physician–patient encounter

Reference	Study type/sample	Governance tool	Key findings
Cecil and Killeen[73]	50 videotaped encounters	Patient assertive control	Physician willingness to let patients control the conversation leads to patient compliance and satisfaction
Schneider[72]	Descriptive (book)	Patient autonomy	Ambiguity, complexity and ambivalence of patients' desire to make their own medical decisions
Kassirer[61]	Descriptive (essay)	Online health care	Need to embrace technological change and address challenges in the physician–patient relationship
Falkum and Forde[94]	990 physicians in Norway	Patient autonomy	Five physician types in terms of paternalism, patient autonomy and moral deliberation (classical paternalists, modern paternalists, autonomists, deliberationists and ambivalents)
Ball and Lillis[78]	Descriptive (review)	E-health	E-health targeted to patients seeking convenience, control and choice; generates improved clinical decision making, efficiency and physician–patient communication
Sciamanna *et al.*[64]	300 US patients	Internet usage for health info	Patients use Internet more if doctors provide them less info and engage them more in decision-making processes
Bauer[30]	Descriptive (opinion)	Cybermedicine	Online medicine as a threat to the moral integrity of physician–patient interactions
Delany[68]	Descriptive (discussion)	Patient autonomy	Understanding the philosophical/ethical theory of autonomy enables doctors' adaptive response to patients' capacity for autonomous choice and decisions
Axtell-Thompson[81]	Descriptive (essay)	Patient choice and autonomy	Ethical limits of justice and beneficence must temper patient autonomy to protect consumers from health-care disparities and negative outcomes of uniformed decisions
Carlsen and Aavik[3]	41 physicians and 829 patients in Norway	Patient decision-making involvement	Patients have a stronger preference for shared decision making than physicians; doctors' positive attitude to shared decisions results in more satisfied patients
Entwistle and Watt[71]	Conceptual review	Patient involvement	Full range of patient decision-making activities (problem recognition and identification, appraisal, selection, implementation, evaluation of solutions)
Ouschan *et al.*[76]	679 patients (chronic sick.) in Australia	Patient empowerment	Consumers' empowerment (i.e. patient control, patient participation and physician support) enhances their trust in service providers and relational outcomes of care
Say *et al.*[92]	Narrative review	Patient involvement in medical decisions	Preference for involvement influenced by demographic features (younger, better educated and female patients are more active), illness experience, health status, attitude towards involvement and interactions with caregivers
Erdem and Harrison-Walker[63]	Descriptive (opinion)	Online information empowerment	Questionable accuracy of health info on the Internet; physicians ought to direct patients to credible sources of online info as means to maintain relational trust
Xie *et al.*[24]	Econometric model	Patient-obtained medical info	Increase in precision of info level of a high number of well-informed patients benefits all patients by receiving better treatment recommendations from physicians

Table 2. Continued

Reference	Study type/sample	Governance tool	Key findings
Ryan and Sysko[8]	2765 US patients	Patient involvement	Higher decision-making involvement for young, more educated and female patients
Mukherjee and McGinnis[75]	Descriptive (review)	E-health care	Online health info enables patients to verify the relevance of proposed treatment and find solutions to their health problems, altering the typical relationship
Wald *et al.*[79]	Descriptive (review)	Web-acquired health information	Advantages (informed choices, shared decision-making, efficient usage of clinical time, online support groups, access to patients' info) and challenges (misinformation, health disparities, shift in traditional medical authority)
Davies and Elwyn[62]	Descriptive (essay)	Patient autonomy	Mandatory autonomy (moral, therapeutic and self-protection arguments) induces negative effects on equity and patient care; preference for optional autonomy
Sommerhalder *et al.*[65]	32 patients and 20 physicians in Switzerland	Internet-informed patients	Discussing patient concerns and clarifying Internet-based health info are critical for successful consultations; but misleading patient views cause conflicts during visits
Skirbekk[34]	Descriptive (essay)	Distrust	Explicating distrust for building a more functional relationship and future trust
Lee and Lin[74]	614 patients in Taiwan	Patient autonomy	Patients with high decisional preference exhibit higher levels of trust, satisfaction and mental and physical health-related quality of life
De Roubaix[67]	Descriptive (essay)	Patient autonomy	Moral responsibility of practitioners to respect patient autonomy and recognize the legitimacy of patient choice
Nguyen[17]	12 300 people in Vietnam	Information empowerment	More educated (empowered) patients able to mitigate agency problems and health-care demand inducement by private providers
Greaney *et al.*[80]	Descriptive (opinion)	Patient autonomy	Need for relational understanding of autonomy based on the concepts of relationality, care and responsibility
Fang and Rizzo[77]	9294 US physicians	Info-oriented patients	Health info from alternative sources enhances patient choice but results in lower physician career satisfaction
Schenker *et al.*[36]	50 US patients	Health-care system distrust	Patients' health-care system distrust negatively affect their level of trust in physicians
Levy[82]	Descriptive (opinion)	Patient autonomy	Owing to patients' reasoning limitations, autonomy can be promoted by limiting their degree of freedom to choose

outcomes[73,74] and display higher levels of satisfaction with received services.[3]

Patients' Internet-driven information-seeking behaviour[75,76] led to the enrichment of physician–patient governance attributes. Many patients value the convenience, anonymity and reduced cost of extracting health information from online sources rather than depending on their caregiver. As service consumers become more knowledgeable, the agency relationship between patients and physicians improves through reduced information asymmetries.[9] Patients with enhanced medical literacy can narrow the information gap and monitor physicians' actions comparing their recommendations against web-posted procedures.[63,77] The effectiveness of patient-obtained medical information is boosted when the number of information-empowered patients is sufficiently high.[24] Ill-informed patients can benefit from higher levels of information accuracy of well-informed patients by obtaining better physician advice.

Patients' vigilance and self-determination emerge as governance mechanisms in studies that advocate a patient-centred model of physician–patient encounter.[74] The dyadic interactions are conceptualized within a supplier–buyer framework where patients are treated as consumers who make decisions about the services they buy,[56] resulting in informed decision making, improved usage of clinical time and efficient doctor–patient communication.[78,79] In this informed model,[57,58] the physician assumes a morally neutral stance and a passive role of providing factual data about the diagnosis and treatment alternatives without emitting a personal judgment.[59] Owing to an enhanced capacity to make their choices independently, patients endorse the responsibility of selecting the most suitable treatment and service provider based on their individual preferences.

Many scholars acknowledge the limitations of these mechanisms in governing the physician–patient relationship. While some recognize that patient information-empowerment affects the trust embedded in medical encounters,[63] others emphasize the resulting erosion of trust in physicians' morality and impoverishment of relational worth.[61] By altering the substance and nature of interactions, web-based health-care challenges the conventional medical authority[79] and deteriorates the moral integrity of the physician–patient liaison preventing the development of physician empathy and patient trust.[30] Critics of mandated autonomy highlight its failure to consider multiple differences in economic, social and cultural circumstances of individual lives that can restrain peoples' ability to choose. This model may produce adverse effects on interpersonal communication, overall experience and equity and accessibility of health-care services for people from disadvantaged backgrounds.[62]

Some empirical evidence exists indicating that better health literacy and autonomy of patients negatively affects the physicians. For a large sample of practitioners, it was shown that the prevalence of information-oriented patients induced higher levels of physician career dissatisfaction.[77] Doctors might thus perceive patient information-seeking behaviour as an infringement of their professional authority. More educated and informed patients in Vietnam were shown capable of alleviating agency problems and diminishing the demand inducement by private health-care providers.[17] As patients' advanced knowledge and choice may not always best serve them generating detrimental outcomes,[80] reasonable ethical constraints should be applied when promoting patient autonomy.[81,82] As physician–patient information asymmetries and power differentials might not be overcome completely, emphasizing the respect of human rights and dignity could allow keeping them at levels mutually agreed by both parties.[83]

Adepts of patient self-determination and information-empowerment believe that these devices are relevant solutions for repairing the deteriorating trust and improving the physician–patient relationship. The Internet can be used to increase the number of (virtual) interactions and encourage patients' reliance on their physician's judgment.[63] In a study of Australian patients, it was reported that the medical

literacy of consumers enhanced their trust in caregivers.[76] To regain patient trust, some scholars plead for a governance model of optional autonomy and collaboration between participants,[62] while others call for a renewed commitment to moral integrity and ethical decision making.[49] A more philosophical stance to distrust–trust interconnectedness suggests that patients' trust is viewed as an implicitly assumed and taken-for-granted belief in physician's altruistic intensions.[34] Recognizing that trust can be a negotiated phenomenon, which is open to explicit interpretations may allow the physician to involve the patient in explicating distrust as a means for rebuilding trust when the implicit foundation for trust is lacking.

Conceptual framework and further research

Conceptual framework

Our literature review indicates that a considerable scholarly disagreement exists concerning the efficacy of trust- and distrust-based mechanisms in governing the physician–patient relationship. The cause of findings' inconsistencies is related to researchers' propensity to emphasize a single facet of this complex phenomenon rather than embrace a comprehensive analysis of interconnected elements that underlie the ongoing interactions between the two parties. Extant accounts of trust and distrust governance in the physician–patient encounter are one-sided and non-relational, focusing on the perspective of one party at the expense of the other. Trust-based studies emphasize the importance of patient confidence in practitioners and physician trustworthiness, but ignore the clinical significance of physician trust in patients and the need for trustful patients.[33,84] Distrust-driven research promotes patient-centredness in medical decision making, but overlooks the ethical consequences of patient autonomy for physician acting and professional authority.[80–82] It is critical to acknowledge that multiple interpersonal (communication, mutual understanding), systemic (changes in health-care economics, rising costs) and societal (technological advancements, evolving values) challenges will constantly alter the essence of the physician–patient interaction.[83] Given the multidisciplinary nature of the topic, the key aspects from health-care management need to be supplemented by insights from economics, sociology, ethics and governance disciplines to assist in the uncovering of governance attributes of successful medical encounters. Sociologists develop a more realistic description of the physician–patient relationship than economists by considering the social nature of this construct and accounting for the heterogeneity of both parties in the service exchange.[27]

We advance a conceptual framework that might guide future research endeavours on the effective governance of relational processes under the umbrella of clinical governance. The proposed framework (see Fig. 1) is multidimensional, seeking to integrate multiple considerations from various health-care domains to illustrate a holistic picture of complexities surrounding the physician–patient relationship. Positioning the process of medical service delivery within a broader cultural and regulatory context pertaining to each national health-care system, the framework renders a full account of the relational nature of the physician–patient encounter and relies on the concept of fit between patients' needs and physicians' behavioural styles. The identification of optimal governance mechanisms for the established interactional model is shaped by individual characteristics of participants and dependent upon the extent to which the physician provision of care is

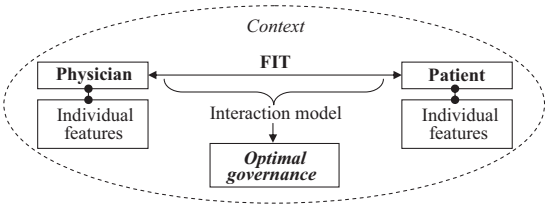

Figure 1 Conceptual framework for governing the physician-patient relationship.

matched to specific preferences of patients.[55] Our framework seeks to overcome the one-sidedness of the paternalistic and informed decision-making models[57,58] and extend the interpretative[15,85] and shared decision-making models[57,58] beyond the recognition of the importance of both parties by contextualizing the relational encounter and considering the contingency of the physician–patient interaction.

When analysing the agency relationship in health-care markets and the effectiveness of trust- and distrust-based governance devices in mitigating agency problems, it is critical to acknowledge the influence of the two parties engaged in the medical exchange. There is no clear dividing line between the physician and patient decision-making authority, and the optimal decision is the one which can be justified from the perspectives of both patients and physicians.[86,87] Recent studies in health economics show that the attainment of satisfactory treatment outcomes is a joint production of physician's efforts and patient's behaviour.[26,28] Given that not all patients are homogeneous and that physicians vary across their personal features, different physicians may respond differently to patients who are more or less well informed by issuing dissimilar recommendations, affecting the erected model of interpersonal interaction.

One the one hand, the literature indicates that socio-demographic attributes of patients such as age, ethnicity, gender, education, economic status and insurance coverage determine their level of distrust in physicians,[88,89] whereas physicians' propensity to release information is dependent upon patients' individual features and communicative styles.[90] More professionally qualified and younger patients who ask more questions about their health situation and possible medication tend to receive more information[90] or exert more authority concerning their own treatment.[4,8] Female patients are found to display more information-seeking behaviour[91] and higher involvement in medical decision making[8,92] and exert more freedom of choice in selecting their medical therapy[4] when compared to men.

On the other hand, the social and professional backgrounds of physicians which refer to race, gender, number of years of clinical practice, nationality of the graduation institution and certification status reportedly affect the health service encounter and its outcomes.[77,93] A study found that ethical behaviour of hospital employees in relation to patients is influenced by gender and professional education in the field of medical ethics.[21] Female physicians are reported to be more sensitive to patients' information requirements and more likely to involve them in decision-making processes concerning their care.[91] Younger doctors and female practitioners in Norway display fewer paternalistic traits and higher levels of respect and consideration of patient autonomy.[94]

The optimal governance of the physician–patient relationship relies on the idea of matching clinical behaviour of physicians to patients' information disclosure and self-determination preferences. In a study of patients with life-threatening disease, it was suggested that in the palliative care setting, where information provision can raise major ethical concerns and be viewed as useful or harmful when patients approach the end of life, it is relevant to examine patients' needs for being informed about their illness and involved in treatment decisions.[95] Drawing upon observations of doctor–patient consultations, researchers found that physicians varied significantly on their ability to meet patients' preferences for decisional autonomy concerning their therapy.[96] To secure quality interactions, health-care professionals should opt for a contingency approach[8,74] by considering the specific needs of patients to match information and decision-making levels to individual patient inclinations.

Future research

The advanced conceptual framework may serve as a guide for identifying priorities for further research on the successful governance of the physician–patient encounter. Future studies could be directed towards shedding light on

the extent to which relationship governance influences health-relevant outcomes and opens the possibility for the attainment of long-term relational outcomes leading to patient satisfaction with the overall process of service delivery. Additional evidence is required to determine which individual features of both patients and physicians[89,97] are more influential in the establishment of optimal interactional models, and how the concept of fit between patients' needs for autonomy[98] and physicians' interpersonal skills[95] can assist in the identification of most effective governance mechanisms. It might well be the case that patients' trust and reliance on physicians' moral values, rather than distrust in ethical constraints of physician behaviour, are optimal governance attributes when patients' preferences for information and self-determination are very limited, and vice-versa when these preferences are ubiquitous.

As the reliance on exclusively trust- or distrust-based governance arrangements can result in a one-sided system, which may be disadvantageous for either the patient or the physician,[30,40] new theoretical perspectives should be explored that provide the opportunity to overcome the continuous tension between different options. In an attempt to conciliate these ongoing rivalries within a complex system of plural governance, corporate governance researchers have advocated that multiple governance devices can act as substitutes or complement each other.[99] In the context of interorganizational partnerships, it was found that perfectly trusting relationships are not desirable and distrust has to be seen as a normal component of partnership governance, suggesting that relational trust ought to be supplemented by sanctioning processes and tight monitoring.[39] Improving our understanding of the interrelatedness among various governance mechanisms and uncovering the situations when in lieu of (or along with) patients' vigilance and involvement some social and ethical conventions can lead to expected outcomes may be highly relevant in health-care markets. Whether trust- and distrust-based attributes for governing the physician–patient relationship should be looked upon as complementing or substituting alternatives is an important question worthy of future investigation.

Considering the confounding findings in the literature, more empirical work on the efficacy of governance arrangements in the physician–patient encounter is welcome.[1] Many models were developed to conceptualize the importance of patients' trust in physicians, but few measures are available to test these theories in an empirical setting.[42] The above literature review has shown that the majority of studies on the governance of physician–patient relationship were conducted in the context of Anglo-Saxon medical markets[2,53,76] and rarely in other national environments like Vietnam,[17] Taiwan[45,74] or Japan.[29] Recently, researchers started to recognize that the effectiveness of micro-level clinical processes is significantly shaped by macro factors and constraints stemming from the specificities of national health-care systems.[76] Future studies which take into account the institutional, regulatory and cultural facets of embeddedness may contribute to the diversification of the current state of contextualized knowledge, which is largely dominated by American evidence.

Given the paucity of research in this area, more attention should be dedicated to the analysis of governance aspects in health-care markets, in general, and interpersonal processes between market participants, in particular. To remove obstacles for continuous quality improvement in the medical sector, new micro-level initiatives have to be undertaken under the clinical governance umbrella.[25] Considering recent realities of patient autonomy and information empowerment, novel governance combinations are needed today for tackling the relational challenges in the modified physician–patient encounter. As physicians are accountable to their patients for the standards of service they deliver, additional efforts could be deployed to define appropriate ways of working, behaving and interacting. Optimal models of the physician–patient relationship and effective governance mechanisms for securing beneficial outcomes are yet to be identified.

These avenues for further inquiry would benefit greatly if tackled through a multidisciplinary lens, where current health-care concepts, models and theories could be enriched by considerations from sociology, economics, governance and ethics backgrounds.

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